

(6) Areas in the vicinity of any cargo high-velocity vent outlet during cargo loading and discharging of storage tanks, within a vertical cylinder of unlimited height, of 0.5 meters radius centered upon the vent outlet, and within a hemisphere of 0.5 meters radius below the vent outlet.

(c) The following are Class I Division 1 (Zone 1) locations:

(1) Areas on an open deck, or a semi-enclosed space on an open deck, that are 2.5 meters beyond the Class I Special Division 1 (Zone 0) areas cited in paragraphs (b)(3) and (4) of this section.

(2) Areas on an open deck, or a semi-enclosed space on an open deck, that are within 3 meters of any cargo manifold valve, cargo valve, cargo pipe flange, cargo tank hatch, sight port, tank cleaning opening, and opening into cofferdams or other Zone 1 spaces.

(3) Regardless of the level of natural ventilation, areas on an open deck above the tank top of each cargo tank extending out 3 meters beyond the tank top boundaries of each cargo tank, up to a height of 2.4 meters above the deck.

(4) Areas on an open deck within spillage coamings surrounding cargo manifold valves extending 3 meters beyond the boundaries of the spillage coamings, up to a height of 2.4 meters.

(5) A void space or an enclosed space immediately above, below or adjacent to an integral cargo storage tank, including cofferdams and permanent (for example, segregated) ballast tanks adjacent to integral cargo storage tanks.

(6) A hold space containing an independent cargo storage tank.

(7) Compartments for cargo transfer hoses.

(8) Enclosed or semi-enclosed spaces in which pipes containing cargoes are located.

(9) Areas 7.5 meters beyond the cylinder and 7.5 meters beyond the hemisphere of the Class I Special Division 1 (Zone 0) hazardous locations cited in paragraph (b)(5) of this section.

(10) Areas 5.5 meters beyond the cylinder and 5.5 meters beyond the hemisphere of the Class I Special Division 1 (Zone 0) hazardous locations cited in paragraph (b)(6) of this section.

(d) The following are Class I Division 2 (Zone 2) locations:

(1) Areas on an open deck, or a semi-enclosed space on an open deck, that are 1.5 meters beyond the Class I Division 1 (Zone 1) areas cited in paragraphs (c)(1) through (4) of this section.

(2) Areas 1.5 meters beyond the cylinder and 1.5 meters beyond the hemisphere of the Class I Special Division 1 (Zone 1) hazardous locations cited in paragraph (c)(9) of this section.

(3) Areas 4 meters beyond the cylinder and 4 meters beyond the hemisphere of the Class I Division 1 (Zone 1) hazardous locations cited in paragraph (c)(10) of this section.

(4) Enclosed spaces beyond the open deck areas cited in paragraph (c)(3) of this section that are below the level of the main deck and have an opening onto the main deck or at a level less than 0.5 meters above the main deck, unless—

(i) The entrances to such spaces, including ventilation inlets and outlets, are situated at least 5 meters from the closest integral cargo tank bulkhead and at least 10 meters measured horizontally from any integral cargo tank outlet or gas or vapor outlet; and

(ii) The spaces are mechanically ventilated.

§ 111.106-11 Classification of storage and handling locations of heated combustible liquid cargoes.

(a) This section applies to locations surrounding the storage and handling of combustible liquid cargoes with closed-cup flashpoints exceeding 60 °C (140 °F).

(b) The interiors of independent storage tanks and integral tanks containing cargoes with closed-cup flashpoints of 60 °C (140 °F) or higher and heated to within 15 °C of their flashpoint are considered Class I Special Division 1 (Zone 0). The hazardous locations in § 111.106-9 of this subpart apply.

§ 111.106-13 Cargo handling devices or cargo pump rooms handling flammable or combustible cargoes.

(a) This section is applicable to enclosed areas containing devices handling flammable or combustible liquid cargoes with closed-cup flashpoints not exceeding 60 °C (140 °F).